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ABSTRACT

Career educators and counselors have long recognized that factual information about careers and employability skills, presented in traditional classroom formats, do not prepare students to enter the workplace. This digest explores the move toward stronger experiential learning in career education. Career education initiatives such as work experience, job shadowing, and co-op education have increased but they are difficult to manage and may represent too large a leap from traditional classroom instruction. This difficulty can be met with in-class employment simulation. To be useful, a simulation must model all of the important skills necessary for a successful transition to work. There are numerous benefits derived from such simulations: learners are provided with opportunities for active experimentation in solving realistic problems; the essential elements of the workplace are experienced but without its attendant hazards; errors can be corrected more readily, and the connections among profitability, team success; and individual work skills are clearly demonstrated. However, to be effective, workplace simulations must feature an accurate underlying model of the workplace, objectives which reflect desirable knowledge, and characteristics of the learning environment, among other things. One such program has demonstrated its use with adolescents and young adults in learning work-transition skills. (RJM)

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by Kathleen Cairns

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Using Simulations to Enhance Career Education

Kathleen Cairns

Overview

Career educators and counselors have long recognized that factual information about careers and employability skills, presented in traditional classroom formats, insufficiently prepares students to enter an increasingly complex workplace (e.g., Crew, 1977). Various authors (e.g., Barth, 1984; Klausmeier & Daresh, 1983) have suggested that a shift toward a stronger experiential learning focus in career education could help students make the transition from fact-based learning about employment to skilled job performance.

These suggestions have led to an increase in experiential career education initiatives such as work experience, job shadowing, and co-op education. These programs offer many advantages; however, they are extremely complex to manage, are often difficult to access, and may represent too large a leap from traditional classroom instruction for students with special problems or poor work histories (Price, 1991). The in-class employment simulation has been proposed to provide either an intermediate step between classroom instruction and work placement or as a substitute for placement programs where these are not available (or where the student is not ready for them)(Cairns & Woodward, 1994).

The fact that few such programs have been developed appears to result from two factors: (1) A emphasis on computer-managed, information-based career information programs has substantially improved and customized the delivery of fact-based career education, and (2) Such programs have done little to assist students in translating career knowledge into skilled performance.

To be useful, a simulation must model all of the important skills necessary for a successful transition to work. It must be sufficiently complex to be credible to students, sufficiently comprehensive to satisfy curriculum requirements, and sufficiently uncomplicated to be used by teachers who may be unaccustomed to experiential approaches to teaching and learning.

Benefits of Simulations

Simulation development thus becomes a lengthy process of designing, field testing, redesigning, and further testing, which can tax the resources and the patience of all concerned. Counterbalancing these difficulties, however, are the numerous potential benefits of simulations:

- Learners are provided with opportunities for active experimentation in solving realistic problems which require the integration of knowledge, skills, personal attitudes, and positive work values.

- The essential elements of the workplace are experienced, but without its attendant hazards and inconveniences (Price, 1991).

- Students can formulate and test hypotheses, identify patterns in their own and others' behavior, make decisions and observe consequences which might, on the job, take weeks to transpire.

- They can then use these opportunities to modify their decisions and actions and to observe the impact of such changes.

- Errors can be corrected more readily and without such high interpersonal cost.

- Students learn that individual work effectiveness and the success of the employer's business are a complex, interactive system.

- The connections between profitability, team success, and individual work skills are clearly demonstrated (Corbeil, Laveault, & Saint-Germain, 1989).

Simulations are thought to be effective, in part,because they elicit higher levels of arousal, motivation, task engagement, and quality of problem-solving in students than that offered by traditional classroom methods (Funke, 1988). In addition, they teach persistence, creativity, appropriate help seeking, and cooperative teamwork.

Characteristics Of An Effective Workplace Simulation

Effective work simulations offer the following features:

1. An accurate underlying model of the workplace, containing realistic representations of the workplace, a high degree of similarity between decisions in the simulation and those required in real-life, and realistic, real-life consequences.

2. Objectives which reflect desirable knowledge (facts, concepts, generalizations), skills (literacy, numeracy, self-management, problem solving), and attitudes (cooperation, leadership, initiative).

3. A method for assessing the learner's entering behaviors, skill levels, and employment-related knowledge and attitudes.

4. Activities which engage and challenge the learner while providing opportunities for frequent, overt learner responses to increasingly complex situations; encountering the realistic consequences of personal decisions, evaluating these, and predicting future outcomes: receiving personalized and immediate feedback; reflective self-evaluation through student record keeping (journals or equivalent); instructor review of student progress; multiple evaluation methods built in to the work process, (e.g., teacher observation checklists, student journal writing or 'lab' reports, structured group discussions, and the use of videotaping; a positive record of extensive field testing, to allow potential users to evaluate the validity of the simulation for their context; a well designed and detailed instructor's manual; sufficient structural flexibility to allow the simulation to be adjusted to meet the needs of particular teachers, counselors, and learners and availability of teacher in-service or other forms of support for teachers who are not familiar with the use of simulations in the classroom or with the specifics of one particular program.

The effectiveness of a simulation in a specific context will also depend upon a number of additional factors:

- Characteristics of the learning environment, such as the availability of adequate resources (classroom time, appropriate space) and materials to allow full use of the method.

- The goodness of fit between the larger curriculum learning objectives and the simulation design.

- The particular learner's needs and characteristics.

- The teacher's or counselor's knowledge of, and willingness to use, experiential methods, including adherence to program instructions and effective debriefing procedures.

WonderTech Work Skills Simulation: An Illustrative Case

The WonderTech Work Skills Simulation (WSS) (Cairns & Woodward, 1994) is a classroom simulation which is useful for assisting adolescents and young adults to learn work-transition skills. It incorporates the requirements outlined above through the provision of a complex, interactive structure that provides students with experience in completing job applications, participating effectively in job interviews, and practicing job performance. The simulation focuses on the development of five skill sets which are considered essential by employers, counselors, and employees: basic academic skills (literacy/numeracy), self-management skills, problem-solving skills, co-operative action or teamwork skills, and leadership or initiative-taking skills.

The WSS develops these skills through work in a simulated branch of an imaginary manufacturing company. Students are 'hired' to fill all of the roles in the company, including supervisory roles. The company has four departments (Administration, Materials, Production, and Sales and Marketing) which offer a wide range of positions. Each participant's job responsibilities are outlined for each simulation 'day' in a work-role in-basket. The outcome indicators are multi-dimensional, including, for example, the profitability of the company, the completion of departmental tasks (such as the issuing of paychecks), and individual performance appraisals carried out by supervisory staff. If the company is to survive, all employees must fill their roles effectively, recognizing that the quality and reliability of each person's work performance affects the work of all other players. The simulation is available in paper and pencil or computer-assisted versions.

Summary and Conclusions

Educators are increasingly suggesting that individuals, especially those in secondary and post-secondary education, should have the opportunity to actively experiment with realistic problems as a principal approach to learning (Thatcher, 1990). Some elements of successful preparation for employment, such as résumé writing and appropriate interview behavior, have traditionally been taught, at least partially, through the use of experiential activities in the classroom. However, a more comprehensive approach is needed to teach students to combine discrete skills into a smooth, personal work performance. A workplace simulation can be an effective way to bridge the gap between students' initial cognitive understanding of employability skills and their full engagement in the workplace, with its attendant risks of failure and discouragement (Cairns & Woodward, 1994).

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